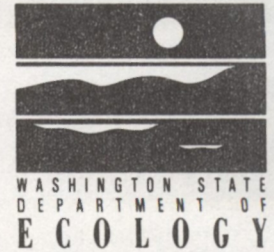


# PROTECTIVE CLOTHING



## Protecting Workers from Hazardous Materials

The people in the picture to the right are not prepared for space travel. They are wearing protective clothing and equipment while testing material to see if it is hazardous. People also may wear such protective suits when doing other work in the vicinity of hazardous waste sites.

### Why Wear Protective Clothing?

Protective gear shields workers from the effects of any hazardous materials they work around. Different groups of hazardous chemicals and potentially hazardous situations require different kinds of protective gear.

The clothing may vary from use of hard hat and steel-toed boots, such as construction workers wear, to heavy overalls and special masks or heavy, enclosed suits and breathing equipment which provides oxygen.

A person whose job requires work at hazardous waste sites may be regularly exposed to all sorts of hazardous chemicals. The levels of contaminants may be very low or very high, or anywhere in between. The risks to the worker's health will also vary from site to site.

State and federal laws require people working with known or potentially hazardous materials to wear the protective clothing.



### Why Don't We Have to Wear Protective Clothing Too?

You aren't experiencing the same risk. Workers wear protective gear whether or not there is an immediate health threat to nearby residents and business employees.

Why? Some workers may be exposed to a great variety of hazardous chemicals from day to day. While the level of pollution at a site may pose little risk for community members, the worker may have already been exposed to much higher levels of the same or other chemicals days or weeks before. The daily exposures could "add up", causing serious health problems for workers not shielded from the chemicals.

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The laws protecting workers contain broad requirements applying to a wide variety of situations. To provide the greatest amount of protection for those who work with hazardous materials, the standards require protection even when the presence of contaminants is only suspected.

### **What Could the Workers Be Doing?**

The workers could be doing a number of things. Most often, they will be investigating the site, collecting samples, or cleaning up the site. Workers could also be reducing an immediate health threat posed by a site. For example, they might be erecting a fence to keep people away from abandoned barrels. However, people may often be doing work completely unrelated to the contamination problems at the site. Still, worker protection laws might require them to wear protective gear.

### **What If the Site Posed a Risk?**

If the site posed an immediate, serious health threat to citizens working or living nearby, the public would be told and measures would be taken to protect them.

### **What is an Immediate Threat?**

Some hazardous chemicals, when present at high enough levels, cause ill effects within a very short time, from seconds to hours or days. These are called "acute" health effects. Other chemicals, when present at very low levels, can cause adverse health effects if a person is exposed to them regularly over a very long time. These long-term effects are called "chronic."

An immediate health threat would exist if the level of a pollutant could cause acute effects. In such cases, Ecology and other agencies must

move very fast to reduce the health and safety risk to citizens.

### **If the Site Posed an Immediate Risk, What Would Be Done?**

If there appeared to be an imminent health risk at a site, Ecology would act quickly to reduce the risk. Other agencies might assist Ecology or even take the lead in the efforts. They include the local health, fire and police departments and the U.S. Environmental Protection Agency.

What would the agencies do? They might fence off a piece of property containing contaminated soil or barrels of hazardous materials. They might remove a material causing a health hazard. Or, if the hazard was serious and was not readily remedied, the agencies could temporarily move people living or working nearby to a safer place. In other situations, the agencies might take heavily contaminated material such as soil to a proper disposal site. If a drinking water supply posed a risk due to the presence of toxic chemicals, we might arrange for another source of drinking water for those families whose drinking water was affected. All of these activities would occur within a matter of hours, days or weeks rather than after months and years of study and planning.

### **If the Site Posed a Long-Term Risk, What Would Be Done?**

If the level of a pollutant would cause long-term, but not short-term, effects, the agencies would have time to plan the most appropriate cleanup for the site.

### **Questions?**

Contact Ecology's Hazardous Waste Investigations and Cleanup Program at 206/438-3000 or toll-free at 1-800-458-0920. If you are wondering about a specific site and have written information about it, please contact the person listed in the material.